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EXAMINER	
MANNING, JOHN	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/600,003	INOUE ET AL.	
	Examiner	Art Unit	
	John Manning	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 31-72 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 31-72 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 3.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 31-33, 35-37, 41, 43-44, 47-49, 52, 54-55, 63-65, 68-69, and 71-72 are rejected under 35 U.S.C. 102(a) as being anticipated by Brown et al. (International Publication Number WO 92/22983).

In regard to claim 31, Brown et al. discloses a large capacity, random access, multi-source audio and video recorder player which is capable of receiving a plurality of simultaneous input signals and which allows a user to view and/or record selected ones of the plurality of input signals. "The multi-source recorder player 100 preferably has multiple input connections, each of which may receive an input signal 101a-101f from air and ground based broadcast sources, cable feeds, or digital distribution sources" (Page 6). The claimed decoder can be met by met by the A/D converter 102, the compressors 103, the decompressors 106 or the D/A converters 110. The reference discloses many digital interfaces, most notably digital outputs 112g and 112 h. "There are two digital output 112g and 112h. Output 112g may be used for sending decompressed digital data, for example, to a digital television receiver" (Page 16). The controller 105 meets the claimed "display processing circuit for displaying information associated with a program recorded on a recording medium loaded in said reproducing

apparatus by a predetermined format". "Controller 105 is a microprocessor which preferably runs a user control program and allows a user to access and control the multi-source recorder player 100" (Page 13). "Of the three analog outputs, output 112a may be set by default in the setup page 300, shown in Fig. 3, to receive the control screens which are described below with respect to the user control section shown in Figs. 2-11" (Page 16). The source column in the stored program list screen 600 shown in Figure 6 indicates the originating source of the signal. Although not displayed in Figure 6, DBS (direct broadcast satellite) is a selectable source. DBS indicates a digital signal. The DBS signal is intrinsically is compressed and multiplexed.

Claim 32 is met by the stored program list screen 600 illustrated in Figure 6. It is noted that the examiner interprets the claim to be written in the alternative, such that a channel number, a program name, a genre, a date of the recording, or a recording time may meet the claimed limitation. The stored program list screen 600 clearly shows the channel number, the program name, date of the recording, and the recording time.

In regard to claim 33, the recording position is inherent to the information displayed. In order for the programs to be retrieved, there must there be position information.

In regard to claim 35, the claimed step of "receiving a digital broadcasting signal constructed by a transport stream in which video data and audio data have been compressed and multiplexed" is met by the received DBS signal. The DBS signal is intrinsically is compressed and multiplexed. The claimed step of "decoding said received digital broadcasting signal" can be met by met by the A/D converter 102, the

compressors 103, the decompressors 106 or the D/A converters 110. The claimed step of "receiving the transport stream from a reproducing apparatus through a digital interface" can be met by the many digital interfaces disclosed, most notably digital outputs 112g and 112 h. "There are two digital output 112g and 112h. Output 112g may be used for sending decompressed digital data, for example, to a digital television receiver" (Page 16). The claimed step "displaying a message showing that a recording mode of a program recorded on a recording medium loaded in said reproducing apparatus indicates an analog recording or a digital recording" is met by the controller 105. "Controller 105 is a microprocessor which preferably runs a user control program and allows a user to access and control the multi-source recorder player 100" (Page 13). "Of the three analog outputs, output 112a may be set by default in the setup page 300, shown in Fig. 3, to receive the control screens which are described below with respect to the user control section shown in Figs. 2-11" (Page 16). The source column in the stored program list screen 600 shown in Figure 6 indicates the originating source of the signal. Although not displayed in Figure 6, DBS (direct broadcast satellite) is a selectable source. DBS indicates a digital signal. Another possible selectable source is cable, which would indicate an analog signal.

Claim 36 is met by the stored program list screen 600 illustrated in Figure 6. It is noted that the examiner interprets the claim to be written in the alternative, such that a channel number, a program name, a genre, a date of the recording, or a recording time may meet the claimed limitation. The stored program list screen 600 clearly shows the channel number, the program name, date of the recording, and the recording time.

In regard to claim 37, the recording position is inherent to the information displayed. In order for the programs to be retrieved, there must there be position information.

In regard to claim 41, Brown et al. discloses a large capacity, random access, multi-source audio and video recorder player which is capable of receiving a plurality of simultaneous input signals and which allows a user to view and/or record selected ones of the plurality of input signals. "The multi-source recorder player 100 preferably has multiple input connections, each of which may receive an input signal 101a-101f from air and ground based broadcast sources, cable feeds, or digital distribution sources" (Page 6). The claimed decoder can be met by met by the A/D converter 102, the compressors 103, the decompressors 106 or the D/A converters 110. The reference discloses many digital interfaces, most notably digital outputs 112g and 112 h. "There are two digital output 112g and 112h. Output 112g may be used for sending decompressed digital data, for example, to a digital television receiver" (Page 16). The controller 105 meets the claimed "display processing circuit for displaying information associated with a program recorded on a recording medium loaded in said reproducing apparatus by a predetermined format". "Controller 105 is a microprocessor which preferably runs a user control program and allows a user to access and control the multi-source recorder player 100" (Page 13). "Of the three analog outputs, output 112a may be set by default in the setup page 300, shown in Fig. 3, to receive the control screens which are described below with respect to the user control section shown in Figs. 2-11" (Page 16). The source column in the stored program list screen 600 shown

in Figure 6 indicates the originating source of the signal. Although not displayed in Figure 6, DBS (direct broadcast satellite) is a selectable source. DBS indicates a digital signal. The DBS signal is intrinsically is compressed and multiplexed. Another possible selectable source is cable, which would indicate an analog signal. The analog output is met by outputs 112a-c. "Of the three analog outputs, output 112a may be set by default in the setup page 300, shown in Fig. 3, to receive the control screens which are described below with respect to the user control section shown in Figs. 2-11" (Page 16).

Claim 43 is met by the stored program list screen 600 illustrated in Figure 6. It is noted that the examiner interprets the claim to be written in the alternative, such that a channel number, a program name, a genre, a date of the recording, or a recording time may meet the claimed limitation. The stored program list screen 600 clearly shows the channel number, the program name, date of the recording, and the recording time.

In regard to claim 44, the recording position is inherent to the information displayed. In order for the programs to be retrieved, there must there be position information.

In regard to claim 47, Brown et al. discloses a large capacity, random access, multi-source audio and video recorder player which is capable of receiving a plurality of simultaneous input signals and which allows a user to view and/or record selected ones of the plurality of input signals. "The multi-source recorder player 100 preferably has multiple input connections, each of which may receive an input signal 101a-101f from air and ground based broadcast sources, cable feeds, or digital distribution sources" (Page 6). The claimed decoder can be met by met by the A/D converter 102, the

compressors 103, the decompressors 106 or the D/A converters 110. The reference discloses many digital interfaces, most notably digital outputs 112g and 112 h. "There are two digital output 112g and 112h. Output 112g may be used for sending decompressed digital data, for example, to a digital television receiver" (Page 16). The controller 105 meets the claimed "display processing circuit for displaying information associated with a program recorded on a recording medium loaded in said reproducing apparatus by a predetermined format". "Controller 105 is a microprocessor which preferably runs a user control program and allows a user to access and control the multi-source recorder player 100" (Page 13). "Of the three analog outputs, output 112a may be set by default in the setup page 300, shown in Fig. 3, to receive the control screens which are described below with respect to the user control section shown in Figs. 2-11" (Page 16). The source column in the stored program list screen 600 shown in Figure 6 indicates the originating source of the signal. Although not displayed in Figure 6, DBS (direct broadcast satellite) is a selectable source. DBS indicates a digital signal. The DBS signal is intrinsically is compressed and multiplexed.

Claim 48 is met by the stored program list screen 600 illustrated in Figure 6. It is noted that the examiner interprets the claim to be written in the alternative, such that a channel number, a program name, a genre, a date of the recording, or a recording time may meet the claimed limitation. The stored program list screen 600 clearly shows the channel number, the program name, date of the recording, and the recording time.

In regard to claim 49, the recording position is inherent to the information displayed. In order for the programs to be retrieved, there must there be position information.

In regard to claim 52, Brown et al. discloses a large capacity, random access, multi-source audio and video recorder player which is capable of receiving a plurality of simultaneous input signals and which allows a user to view and/or record selected ones of the plurality of input signals. "The multi-source recorder player 100 preferably has multiple input connections, each of which may receive an input signal 101a-101f from air and ground based broadcast sources, cable feeds, or digital distribution sources" (Page 6). The claimed decoder can be met by met by the A/D converter 102, the compressors 103, the decompressors 106 or the D/A converters 110. The reference discloses many digital interfaces, most notably digital outputs 112g and 112 h. "There are two digital output 112g and 112h. Output 112g may be used for sending decompressed digital data, for example, to a digital television receiver" (Page 16). The controller 105 meets the claimed "display processing circuit for displaying information associated with a program recorded on a recording medium loaded in said reproducing apparatus by a predetermined format". "Controller 105 is a microprocessor which preferably runs a user control program and allows a user to access and control the multi-source recorder player 100" (Page 13). "Of the three analog outputs, output 112a may be set by default in the setup page 300, shown in Fig. 3, to receive the control screens which are described below with respect to the user control section shown in Figs. 2-11" (Page 16). The source column in the stored program list screen 600 shown

in Figure 6 indicates the originating source of the signal. Although not displayed in Figure 6, DBS (direct broadcast satellite) is a selectable source. DBS indicates a digital signal. The DBS signal is intrinsically is compressed and multiplexed. Another possible selectable source is cable, which would indicate an analog signal. The analog output is met by outputs 112a-c. "Of the three analog outputs, output 112a may be set by default in the setup page 300, shown in Fig. 3, to receive the control screens which are described below with respect to the user control section shown in Figs. 2-11" (Page 16).

Claim 54 is met by the stored program list screen 600 illustrated in Figure 6. It is noted that the examiner interprets the claim to be written in the alternative, such that a channel number, a program name, a genre, a date of the recording, or a recording time may meet the claimed limitation. The stored program list screen 600 clearly shows the channel number, the program name, date of the recording, and the recording time.

In regard to claim 55, the recording position is inherent to the information displayed. In order for the programs to be retrieved, there must there be position information.

In regard to claim 63, Brown et al. discloses a large capacity, random access, multi-source audio and video recorder player which is capable of receiving a plurality of simultaneous input signals and which allows a user to view and/or record selected ones of the plurality of input signals. "The multi-source recorder player 100 preferably has multiple input connections, each of which may receive an input signal 101a-101f from air and ground based broadcast sources, cable feeds, or digital distribution sources" (Page 6). The claimed decoder can be met by met by the A/D converter 102, the

compressors 103, the decompressors 106 or the D/A converters 110. The reference discloses many digital interfaces, most notably digital outputs 112g and 112 h. "There are two digital output 112g and 112h. Output 112g may be used for sending decompressed digital data, for example, to a digital television receiver" (Page 16). The controller 105 meets the claimed "display processing circuit for displaying information associated with a program recorded on a recording medium loaded in said reproducing apparatus by a predetermined format". "Controller 105 is a microprocessor which preferably runs a user control program and allows a user to access and control the multi-source recorder player 100" (Page 13). "Of the three analog outputs, output 112a may be set by default in the setup page 300, shown in Fig. 3, to receive the control screens which are described below with respect to the user control section shown in Figs. 2-11" (Page 16). The source column in the stored program list screen 600 shown in Figure 6 indicates the originating source of the signal. Although not displayed in Figure 6, DBS (direct broadcast satellite) is a selectable source. DBS indicates a digital signal. The DBS signal is intrinsically is compressed and multiplexed.
The source indicates the origin of the transport stream, i.e. the "kind of transport stream".

Claim 64 is met by the stored program list screen 600 illustrated in Figure 6. It is noted that the examiner interprets the claim to be written in the alternative, such that a channel number, a program name, a genre, a date of the recording, or a recording time may meet the claimed limitation. The stored program list screen 600 clearly shows the channel number, the program name, date of the recording, and the recording time.

In regard to claim 65, the recording position is inherent to the information displayed. In order for the programs to be retrieved, there must there be position information.

In regard to claim 68, the claimed step of "receiving a digital broadcasting signal constructed by a transport stream in which video data and audio data have been compressed and multiplexed" is met by the received DBS signal. The DBS signal is intrinsically is compressed and multiplexed. The claimed step of "decoding said received digital broadcasting signal" can be met by met by the A/D converter 102, the compressors 103, the decompressors 106 or the D/A converters 110. The claimed step of "receiving the transport stream from a reproducing apparatus through a digital interface" can be met by the many digital interfaces disclosed, most notably digital outputs 112g and 112 h. "There are two digital output 112g and 112h. Output 112g may be used for sending decompressed digital data, for example, to a digital television receiver" (Page 16). The claimed step "displaying a message showing that a recording mode of a program recorded on a recording medium loaded in said reproducing apparatus indicates an analog recording or a digital recording" is met by the controller 105. "Controller 105 is a microprocessor which preferably runs a user control program and allows a user to access and control the multi-source recorder player 100" (Page 13). "Of the three analog outputs, output 112a may be set by default in the setup page 300, shown in Fig. 3, to receive the control screens which are described below with respect to the user control section shown in Figs. 2-11" (Page 16). The source column in the stored program list screen 600 shown in Figure 6 indicates the originating source

of the signal. Although not displayed in Figure 6, DBS (direct broadcast satellite) is a selectable source. DBS indicates a digital signal.

In regard to claim 69, the claimed step of "receiving a digital broadcasting signal constructed by a transport stream in which video data and audio data have been compressed and multiplexed" is met by the received DBS signal. The DBS signal is intrinsically is compressed and multiplexed. The claimed step of "decoding said received digital broadcasting signal" can be met by met by the A/D converter 102, the compressors 103, the decompressors 106 or the D/A converters 110. The claimed step of "receiving the transport stream from a reproducing apparatus through a digital interface" can be met by the many digital interfaces disclosed, most notably digital outputs 112g and 112 h. "There are two digital output 112g and 112h. Output 112g may be used for sending decompressed digital data, for example, to a digital television receiver" (Page 16). The claimed step "displaying a message showing that a recording mode of a program recorded on a recording medium loaded in said reproducing apparatus indicates an analog recording or a digital recording" is met by the controller 105. "Controller 105 is a microprocessor which preferably runs a user control program and allows a user to access and control the multi-source recorder player 100" (Page 13). "Of the three analog outputs, output 112a may be set by default in the setup page 300, shown in Fig. 3, to receive the control screens which are described below with respect to the user control section shown in Figs. 2-11" (Page 16). The source column in the stored program list screen 600 shown in Figure 6 indicates the originating source of the signal. Although not displayed in Figure 6, DBS (direct broadcast satellite) is a

selectable source. DBS indicates a digital signal. Another possible selectable source is cable, which would indicate an analog signal.

In regard to claim 71, the claimed step of "receiving a digital broadcasting signal constructed by a transport stream in which video data and audio data have been compressed and multiplexed" is met by the received DBS signal. The DBS signal is intrinsically is compressed and multiplexed. The claimed step of "decoding said received digital broadcasting signal" can be met by met by the A/D converter 102, the compressors 103, the decompressors 106 or the D/A converters 110. The claimed step of "receiving the transport stream from a reproducing apparatus through a digital interface" can be met by the many digital interfaces disclosed, most notably digital outputs 112g and 112 h. "There are two digital output 112g and 112h. Output 112g may be used for sending decompressed digital data, for example, to a digital television receiver" (Page 16). The claimed steps "of displaying the information associated with the program recorded on the recording medium loaded in said reproducing apparatus by a predetermined format" is met by the controller 105. "Controller 105 is a microprocessor which preferably runs a user control program and allows a user to access and control the multi-source recorder player 100" (Page 13). "Of the three analog outputs, output 112a may be set by default in the setup page 300, shown in Fig. 3, to receive the control screens which are described below with respect to the user control section shown in Figs. 2-11" (Page 16). The source column in the stored program list screen 600 shown in Figure 6 indicates the originating source of the signal.

Although not displayed in Figure 6, DBS (direct broadcast satellite) is a selectable source. DBS indicates a digital signal.

In regard to claim 72, the claimed step of "receiving a digital broadcasting signal constructed by a transport stream in which video data and audio data have been compressed and multiplexed" is met by the received DBS signal. The DBS signal is intrinsically is compressed and multiplexed. The claimed step of "decoding said received digital broadcasting signal" can be met by met by the A/D converter 102, the compressors 103, the decompressors 106 or the D/A converters 110. The claimed step of "receiving the transport stream from a reproducing apparatus through a digital interface" can be met by the many digital interfaces disclosed, most notably digital outputs 112g and 112 h. "There are two digital output 112g and 112h. Output 112g may be used for sending decompressed digital data, for example, to a digital television receiver" (Page 16). The claimed steps "of displaying the information associated with the program recorded on the recording medium loaded in said reproducing apparatus by a predetermined format" is met by the controller 105. "Controller 105 is a microprocessor which preferably runs a user control program and allows a user to access and control the multi-source recorder player 100" (Page 13). "Of the three analog outputs, output 112a may be set by default in the setup page 300, shown in Fig. 3, to receive the control screens which are described below with respect to the user control section shown in Figs. 2-11" (Page 16). The source column in the stored program list screen 600 shown in Figure 6 indicates the originating source of the signal.

Although not displayed in Figure 6, DBS (direct broadcast satellite) is a selectable source. DBS indicates a digital signal.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 34, 38, 45, 50, 56 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. in view of Yuen et al (US Pat No 6,147,715).

In regard to claim 34, Brown et al. discloses a large capacity, random access, multi-source audio and video recorder player which is capable of receiving a plurality of simultaneous input signals and which allows a user to view and/or record selected ones of the plurality of input signals. Brown et al. fails to explicitly disclose information associated with a program that is "overlapped" or overlaid to a reproduction signal. Yuen et al. teaches information associated with a program that is "overlapped" or overlaid to a reproduction signal so as to provide the user with information in a convenient fashion. "A PIP chip is operatively connected to the guide switch and the program source switch such that in an active mode the PIP chip displays on a television screen a PIP window displaying the moving, real time images of a selected program overlaid on a background comprising selected guide information" (Col 1, Lines 59-64). Consequently, it would have been obvious to one of ordinary skill in the art to implement Brown et al. with information associated with a program that is "overlapped" or overlaid

to a reproduction signal so as to provide the user with information in a convenient fashion.

In regard to claim 38, Brown et al. discloses a large capacity, random access, multi-source audio and video recorder player which is capable of receiving a plurality of simultaneous input signals and which allows a user to view and/or record selected ones of the plurality of input signals. Brown et al. fails to explicitly disclose information associated with a program that is "overlapped" or overlaid to a reproduction signal. Yuen et al. teaches information associated with a program that is "overlapped" or overlaid to a reproduction signal so as to provide the user with information in a convenient fashion. "A PIP chip is operatively connected to the guide switch and the program source switch such that in an active mode the PIP chip displays on a television screen a PIP window displaying the moving, real time images of a selected program overlaid on a background comprising selected guide information" (Col 1, Lines 59-64). Consequently, it would have been obvious to one of ordinary skill in the art to implement Brown et al. with information associated with a program that is "overlapped" or overlaid to a reproduction signal so as to provide the user with information in a convenient fashion.

In regard to claim 45, Brown et al. discloses a large capacity, random access, multi-source audio and video recorder player which is capable of receiving a plurality of simultaneous input signals and which allows a user to view and/or record selected ones of the plurality of input signals. Brown et al. fails to explicitly disclose information associated with a program that is "overlapped" or overlaid to a reproduction signal.

Yuen et al. teaches information associated with a program that is "overlapped" or overlaid to a reproduction signal so as to provide the user with information in a convenient fashion. "A PIP chip is operatively connected to the guide switch and the program source switch such that in an active mode the PIP chip displays on a television screen a PIP window displaying the moving, real time images of a selected program overlaid on a background comprising selected guide information" (Col 1, Lines 59-64). Consequently, it would have been obvious to one of ordinary skill in the art to implement Brown et al. with information associated with a program that is "overlapped" or overlaid to a reproduction signal so as to provide the user with information in a convenient fashion.

In regard to claim 50, Brown et al. discloses a large capacity, random access, multi-source audio and video recorder player which is capable of receiving a plurality of simultaneous input signals and which allows a user to view and/or record selected ones of the plurality of input signals. Brown et al. fails to explicitly disclose information associated with a program that is "overlapped" or overlaid to a reproduction signal. Yuen et al. teaches information associated with a program that is "overlapped" or overlaid to a reproduction signal so as to provide the user with information in a convenient fashion. "A PIP chip is operatively connected to the guide switch and the program source switch such that in an active mode the PIP chip displays on a television screen a PIP window displaying the moving, real time images of a selected program overlaid on a background comprising selected guide information" (Col 1, Lines 59-64). Consequently, it would have been obvious to one of ordinary skill in the art to implement

Brown et al. with information associated with a program that is "overlapped" or overlaid to a reproduction signal so as to provide the user with information in a convenient fashion.

In regard to claim 56, Brown et al. discloses a large capacity, random access, multi-source audio and video recorder player which is capable of receiving a plurality of simultaneous input signals and which allows a user to view and/or record selected ones of the plurality of input signals. Brown et al. fails to explicitly disclose information associated with a program that is "overlapped" or overlaid to a reproduction signal. Yuen et al. teaches information associated with a program that is "overlapped" or overlaid to a reproduction signal so as to provide the user with information in a convenient fashion. "A PIP chip is operatively connected to the guide switch and the program source switch such that in an active mode the PIP chip displays on a television screen a PIP window displaying the moving, real time images of a selected program overlaid on a background comprising selected guide information" (Col 1, Lines 59-64). Consequently, it would have been obvious to one of ordinary skill in the art to implement Brown et al. with information associated with a program that is "overlapped" or overlaid to a reproduction signal so as to provide the user with information in a convenient fashion.

In regard to claim 66, Brown et al. discloses a large capacity, random access, multi-source audio and video recorder player which is capable of receiving a plurality of simultaneous input signals and which allows a user to view and/or record selected ones of the plurality of input signals. Brown et al. fails to explicitly disclose information

associated with a program that is "overlapped" or overlaid to a reproduction signal. Yuen et al. teaches information associated with a program that is "overlapped" or overlaid to a reproduction signal so as to provide the user with information in a convenient fashion. "A PIP chip is operatively connected to the guide switch and the program source switch such that in an active mode the PIP chip displays on a television screen a PIP window displaying the moving, real time images of a selected program overlaid on a background comprising selected guide information" (Col 1, Lines 59-64). Consequently, it would have been obvious to one of ordinary skill in the art to implement Brown et al. with information associated with a program that is "overlapped" or overlaid to a reproduction signal so as to provide the user with information in a convenient fashion.

5. Claims 39-40, 46, 51, 57-60, 62 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. in view of Ohno et al. (US Pat No 5,761,371).

In regard to claim 39, Brown et al. discloses a large capacity, random access, multi-source audio and video recorder player which is capable of receiving a plurality of simultaneous input signals and which allows a user to view and/or record selected ones of the plurality of input signals. The reference fails to explicitly disclose displaying information of the mode of the recorded program. The Ohno et al. reference teaches displaying information of the mode of the recorded program, as shown in Figure 6, used so as to provide the user with information regarding the recording. "Of the data map information, the data of remaining tape length at the start of recording operation, the current residual tape data, the month data, the day data, the day-of-the week data, the

time and minute at which the recording is started, the channel for the recording and the recording modes (standard, triple speed)" (Col 10, Lines 64-67; Col 11, Lines 1-4). Consequently, it would have been obvious to one of ordinary skill in the art to modify Brown et a. with displaying information of the mode of the recorded program so as to provide the user with information regarding the recording.

In regard to claim 40, Brown et al. discloses a large capacity, random access, multi-source audio and video recorder player which is capable of receiving a plurality of simultaneous input signals and which allows a user to view and/or record selected ones of the plurality of input signals. The reference fails to explicitly disclose displaying information of the mode of the recorded program. The Ohno et al. reference teaches displaying information of the mode of the recorded program, as shown in Figure 6, used so as to provide the user with information regarding the recording. "Of the data map information, the data of remaining tape length at the start of recording operation, the current residual tape data, the month data, the day data, the day-of-the week data, the time and minute at which the recording is started, the channel for the recording and the recording modes (standard, triple speed)" (Col 10, Lines 64-67; Col 11, Lines 1-4). Consequently, it would have been obvious to one of ordinary skill in the art to modify Brown et a. with displaying information of the mode of the recorded program so as to provide the user with information regarding the recording.

In regard to claim 46, Brown et al. discloses a large capacity, random access, multi-source audio and video recorder player which is capable of receiving a plurality of simultaneous input signals and which allows a user to view and/or record selected ones

of the plurality of input signals. The reference fails to explicitly disclose displaying information of the mode of the recorded program. The Ohno et al. reference teaches displaying information of the mode of the recorded program, as shown in Figure 6, used so as to provide the user with information regarding the recording. "Of the data map information, the data of remaining tape length at the start of recording operation, the current residual tape data, the month data, the day data, the day-of-the week data, the time and minute at which the recording is started, the channel for the recording and the recording modes (standard, triple speed)" (Col 10, Lines 64-67; Col 11, Lines 1-4). Consequently, it would have been obvious to one of ordinary skill in the art to modify Brown et a. with displaying information of the mode of the recorded program so as to provide the user with information regarding the recording.

In regard to claim 51, Brown et al. discloses a large capacity, random access, multi-source audio and video recorder player which is capable of receiving a plurality of simultaneous input signals and which allows a user to view and/or record selected ones of the plurality of input signals. The reference fails to explicitly disclose displaying information of the mode of the recorded program. The Ohno et al. reference teaches displaying information of the mode of the recorded program, as shown in Figure 6, used so as to provide the user with information regarding the recording. "Of the data map information, the data of remaining tape length at the start of recording operation, the current residual tape data, the month data, the day data, the day-of-the week data, the time and minute at which the recording is started, the channel for the recording and the recording modes (standard, triple speed)" (Col 10, Lines 64-67; Col 11, Lines 1-4).

Consequently, it would have been obvious to one of ordinary skill in the art to modify Brown et a. with displaying information of the mode of the recorded program so as to provide the user with information regarding the recording.

In regard to claim 57, Brown et al. discloses a large capacity, random access, multi-source audio and video recorder player which is capable of receiving a plurality of simultaneous input signals and which allows a user to view and/or record selected ones of the plurality of input signals. The reference fails to explicitly disclose displaying information of the mode of the recorded program. The Ohno et al. reference teaches displaying information of the mode of the recorded program, as shown in Figure 6, used so as to provide the user with information regarding the recording. "Of the data map information, the data of remaining tape length at the start of recording operation, the current residual tape data, the month data, the day data, the day-of-the week data, the time and minute at which the recording is started, the channel for the recording and the recording modes (standard, triple speed)" (Col 10, Lines 64-67; Col 11, Lines 1-4). Consequently, it would have been obvious to one of ordinary skill in the art to modify Brown et a. with displaying information of the mode of the recorded program so as to provide the user with information regarding the recording.

In regard to claim 58, Brown et al. discloses a large capacity, random access, multi-source audio and video recorder player which is capable of receiving a plurality of simultaneous input signals and which allows a user to view and/or record selected ones of the plurality of input signals. "The multi-source recorder player 100 preferably has multiple input connections, each of which may receive an input signal 101a-101f from

air and ground based broadcast sources, cable feeds, or digital distribution sources" (Page 6). The claimed decoder can be met by met by the A/D converter 102, the compressors 103, the decompressors 106 or the D/A converters 110. The reference discloses many digital interfaces, most notably digital outputs 112g and 112 h. "There are two digital output 112g and 112h. Output 112g may be used for sending decompressed digital data, for example, to a digital television receiver" (Page 16). The controller 105 meets the claimed "display processing circuit for displaying information associated with a program recorded on a recording medium loaded in said reproducing apparatus by a predetermined format". "Controller 105 is a microprocessor which preferably runs a user control program and allows a user to access and control the multi-source recorder player 100" (Page 13). "Of the three analog outputs, output 112a may be set by default in the setup page 300, shown in Fig. 3, to receive the control screens which are described below with respect to the user control section shown in Figs. 2-11" (Page 16). The reference fails to explicitly disclose displaying information based on a kind of compression system of the recorded program recorded on the recording medium. The Ohno et al. reference teaches displaying based on the kind of "compression", as shown in Figure 6, used so as to provide the user with information regarding the recording. "Of the data map information, the data of remaining tape length at the start of recording operation, the current residual tape data, the month data, the day data, the day-of-the week data, the time and minute at which the recording is started, the channel for the recording and the recording modes (standard, triple speed)" (Col 10, Lines 64-67; Col 11, Lines 1-4). Consequently, it would have been obvious to

one of ordinary skill in the art to modify Brown et a. with displaying information based on a kind of compression system of the recorded program recorded on the recording medium so as to provide the user with information regarding the recording.

Claim 59 is met by the stored program list screen 600 illustrated in Figure 6. It is noted that the examiner interprets the claim to be written in the alternative, such that a channel number, a program name, a genre, a date of the recording, or a recording time may meet the claimed limitation. The stored program list screen 600 clearly shows the channel number, the program name, date of the recording, and the recording time.

In regard to claim 60, the recording position is inherent to the information displayed. In order for the programs to be retrieved, there must there be position information.

In regard to claim 62, Brown et al. discloses a large capacity, random access, multi-source audio and video recorder player which is capable of receiving a plurality of simultaneous input signals and which allows a user to view and/or record selected ones of the plurality of input signals. The reference fails to explicitly disclose displaying information of the mode of the recorded program. The Ohno et al. reference teaches displaying information of the mode of the recorded program, as shown in Figure 6, used so as to provide the user with information regarding the recording. "Of the data map information, the data of remaining tape length at the start of recording operation, the current residual tape data, the month data, the day data, the day-of-the week data, the time and minute at which the recording is started, the channel for the recording and the recording modes (standard, triple speed)" (Col 10, Lines 64-67; Col 11, Lines 1-4).

Consequently, it would have been obvious to one of ordinary skill in the art to modify Brown et a. with displaying information of the mode of the recorded program so as to provide the user with information regarding the recording.

In regard to claim 67, Brown et al. discloses a large capacity, random access, multi-source audio and video recorder player which is capable of receiving a plurality of simultaneous input signals and which allows a user to view and/or record selected ones of the plurality of input signals. The reference fails to explicitly disclose displaying information of the mode of the recorded program. The Ohno et al. reference teaches displaying information of the mode of the recorded program, as shown in Figure 6, used so as to provide the user with information regarding the recording. "Of the data map information, the data of remaining tape length at the start of recording operation, the current residual tape data, the month data, the day data, the day-of-the week data, the time and minute at which the recording is started, the channel for the recording and the recording modes (standard, triple speed)" (Col 10, Lines 64-67; Col 11, Lines 1-4). Consequently, it would have been obvious to one of ordinary skill in the art to modify Brown et a. with displaying information of the mode of the recorded program so as to provide the user with information regarding the recording.

6. Claims 42, 52, 70 and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al.

In regard to claim 42, Brown et al. discloses a large capacity, random access, multi-source audio and video recorder player which is capable of receiving a plurality of simultaneous input signals and which allows a user to view and/or record selected ones

of the plurality of input signals. The reference fails to explicitly disclose the displaying of an alarm or "message" if the user selects an input/out that is inconsistent with the mode of the recorder/reproducer. However, it is submitted that it would have been clearly obvious to one of ordinary skill in the art to modify Brown et al. with the displaying of an alarm or "message" if the user selects an input/out that is inconsistent with the mode of the recorder/reproducer so as to notify the user of any problem that may arise in program recording/reproduction.

In regard to claim 52, Brown et al. discloses a large capacity, random access, multi-source audio and video recorder player which is capable of receiving a plurality of simultaneous input signals and which allows a user to view and/or record selected ones of the plurality of input signals. "The multi-source recorder player 100 preferably has multiple input connections, each of which may receive an input signal 101a-101f from air and ground based broadcast sources, cable feeds, or digital distribution sources" (Page 6). The claimed decoder can be met by met by the A/D converter 102, the compressors 103, the decompressors 106 or the D/A converters 110. The reference discloses many digital interfaces, most notably digital outputs 112g and 112 h. "There are two digital output 112g and 112h. Output 112g may be used for sending decompressed digital data, for example, to a digital television receiver" (Page 16). The controller 105 meets the claimed "display processing circuit for displaying information associated with a program recorded on a recording medium loaded in said reproducing apparatus by a predetermined format". "Controller 105 is a microprocessor which preferably runs a user control program and allows a user to access and control the

multi-source recorder player 100" (Page 13). "Of the three analog outputs, output 112a may be set by default in the setup page 300, shown in Fig. 3, to receive the control screens which are described below with respect to the user control section shown in Figs. 2-11" (Page 16). The source column in the stored program list screen 600 shown in Figure 6 indicates the originating source of the signal. Although not displayed in Figure 6, DBS (direct broadcast satellite) is a selectable source. DBS indicates a digital signal. The DBS signal is intrinsically is compressed and multiplexed. The reference fails to explicitly disclose the displaying a message showing that a recorded program cannot be decoded. However, it is submitted that it would have been clearly obvious to one of ordinary skill in the art to modify Brown et al. with the displaying a message showing that a recorded program cannot be decoded so as to notify the user of any problem that may arise in program reproduction.

In regard to claim 70, Brown et al. discloses a large capacity, random access, multi-source audio and video recorder player which is capable of receiving a plurality of simultaneous input signals and which allows a user to view and/or record selected ones of the plurality of input signals. The reference fails to explicitly disclose the displaying of an alarm or "message" if the user selects an input/out that is inconsistent with the mode of the recorder/reproducer. However, it is submitted that it would have been clearly obvious to one of ordinary skill in the art to modify Brown et al. with the displaying of an alarm or "message" if the user selects an input/out that is inconsistent with the mode of the recorder/reproducer so as to notify the user of any problem that may arise in program recording/reproduction.

In regard to claim 72, the claimed step of "receiving a digital broadcasting signal constructed by a transport stream in which video data and audio data have been compressed and multiplexed" is met by the received DBS signal. The DBS signal is intrinsically is compressed and multiplexed. The claimed step of "decoding said received digital broadcasting signal" can be met by met by the A/D converter 102, the compressors 103, the decompressors 106 or the D/A converters 110. The claimed step of "receiving the transport stream from a reproducing apparatus through a digital interface" can be met by the many digital interfaces disclosed, most notably digital outputs 112g and 112 h. "There are two digital output 112g and 112h. Output 112g may be used for sending decompressed digital data, for example, to a digital television receiver" (Page 16). The claimed steps "of displaying the information associated with the program recorded on the recording medium loaded in said reproducing apparatus by a predetermined format" is met by the controller 105. "Controller 105 is a microprocessor which preferably runs a user control program and allows a user to access and control the multi-source recorder player 100" (Page 13). "Of the three analog outputs, output 112a may be set by default in the setup page 300, shown in Fig. 3, to receive the control screens which are described below with respect to the user control section shown in Figs. 2-11" (Page 16). The source column in the stored program list screen 600 shown in Figure 6 indicates the originating source of the signal. Although not displayed in Figure 6, DBS (direct broadcast satellite) is a selectable source. DBS indicates a digital signal. The reference fails to explicitly disclose the displaying a message showing that a recorded program cannot be decoded. However,

it is submitted that it would have been clearly obvious to one of ordinary skill in the art to modify Brown et al. with the displaying a message showing that a recorded program cannot be decoded so as to notify the user of any problem that may arise in program reproduction.

7. Claim 61 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. in view of Ohno et al. and further in view of Yuen et al. (US Pat No 6,147,715).

In regard to claim 61, the combination of Brown et al. and Ohno et al. discloses a large capacity, random access, multi-source audio and video recorder player which is capable of receiving a plurality of simultaneous input signals and which allows a user to view and/or record selected ones of the plurality of input signals. The combination of Brown et al. and Ohno et al. fails to explicitly disclose information associated with a program that is "overlapped" or overlaid to a reproduction signal. Yuen et al. teaches information associated with a program that is "overlapped" or overlaid to a reproduction signal so as to provide the user with information in a convenient fashion. "A PIP chip is operatively connected to the guide switch and the program source switch such that in an active mode the PIP chip displays on a television screen a PIP window displaying the moving, real time images of a selected program overlaid on a background comprising selected guide information" (Col 1, Lines 59-64). Consequently, it would have been obvious to one of ordinary skill in the art to implement the combination of Brown et al. and Ohno et al. with information associated with a program that is "overlapped" or overlaid to a reproduction signal so as to provide the user with information in a convenient fashion.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as follows.

- The Ochi et al. reference (US Pat No 6,556,776) discloses a digital signal recording/reproducing apparatus.
- The Mankovitz reference (US Pat No 5,541,738) discloses an indexing VCR system with an electronic program guide.
- The Lang reference (US Pat No 5,164,839) discloses a method for handling audio/video source information.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Manning whose telephone number is 703-305-0345. The examiner can normally be reached on M-F: 7:30 - 5:00 (off every other Wednesday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W Miller can be reached on 703-305-4795. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-9695 for regular communications and 703-746-9695 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is (703) 308-HELP.

JM
May 17, 2004

JOHN MILLER
SUPERVISORY PATENT EXAMINER
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